

# GASTROINTESTINAL DISEASES IN FERRETS

---

By Gregory Rich, DVM; Rick Axelson, DVM  
VCA Animal Hospital

**G**astrointestinal (GI) conditions are a fairly common occurrence in ferrets. From dental disease to inflammatory bowel disease, coronavirus enteritis to gastrointestinal foreign bodies, ferrets may develop a wide variety of conditions that affect their digestion and defecation. Some conditions, such as intestinal foreign bodies, are readily prevented and easily resolved with medication or surgery, while others require considerable diagnostic investigation and may need long-term treatment.

## Dental Disease

Ferrets two years of age and older may be affected by dental tartar, gingivitis (gum inflammation), periodontal disease, or frank dental decay. These problems are more common in animals fed moist (canned) diets, although even on a dry diet, tartar may accumulate as the animal ages. Regular (weekly) brushing with dog or cat toothpaste can help control tartar. If toothbrushing is started at a young age, your ferret should be able to avoid most dental issues. In some cases, an annual dental cleaning done under anesthesia may be necessary to control dental disease. Chewing and gnawing on objects may help prevent the build-up of tartar, but these habits can lead to tooth damage, such as fractures (breaking) of the long canine teeth. Fractured tooth tips are not necessarily a problem, unless there is exposure of the dental pulp. Tooth root abscesses can occur but are not common in pet ferrets.

## Gastrointestinal Foreign Bodies

*"Ferrets are very inquisitive and love to chew just about anything."*

Ferrets are very inquisitive and love to chew just about anything. They often swallow rubber, foam, or plastic objects. This is especially a problem in young inquisitive ferrets, but can happen in older ferrets too. Gastric (stomach) or intestinal obstructions are more often caused by hairballs or, rarely, by tumors in older ferrets. The key features of a gastrointestinal foreign body are severe lethargy (lack of energy), anorexia (reduced appetite) with or without vomiting, and a reduced volume of feces. Although one would expect vomiting to be the main sign, in many cases it is not. Foreign objects in the small intestine often cause severe pain. Your veterinarian may be able to palpate (feel) the intestinal foreign body if your ferret is relaxed. Objects in

the stomach cause less pain and are more challenging to feel by means of abdominal palpation. Foreign bodies in the small intestines are more likely to cause a blockage due to the small diameter of the intestinal tract.

Gastrointestinal foreign bodies may be difficult to diagnose without further testing. Plain or "survey" radiographs will usually be taken initially, but not all foreign bodies can be seen on plain radiographs. Often a barium contrast series will be recommended, in which your veterinarian will administer oral barium to your ferret, and then take radiographs at specific timed intervals after administration. Barium will often show the site and size of the obstruction from a foreign body, even if the object is not visible on the survey radiograph.

Exploratory surgery of the abdomen is often necessary to remove and resolve the obstruction caused by a foreign body, hairball, or a tumor. If diagnosed and treated early, most ferrets recover from an intestinal foreign body obstruction and corrective surgery. Prevention is obviously preferred and ferrets should not have access to objects that can be chewed and swallowed. Ferret-proof your house!

## Parasites

Gastrointestinal parasites are rarely seen in ferrets, but any ferret with diarrhea should have a microscopic fecal examination. While gastrointestinal worms or eggs from worms are very rarely seen, protozoa such as *Giardia* or *Coccidia* may occur. Intestinal protozoa can cause persistent diarrhea and/or a rectal prolapse (protrusion of anal or rectal tissue).

## Diarrhea

*"Diarrhea is not a disease per se, but rather a sign of a gastrointestinal problem."*

Diarrhea is not a disease per se, but rather a sign of a gastrointestinal problem. Diarrhea can range from liquid to semi-solid feces. Depending on the cause, the feces may be dark-colored, green, mucoid, with a slimy appearance or granular and 'seedy' with a semi-liquid consistency. Ferrets with diarrhea may not appear to be visibly sick, or they may show anorexia, vomiting, weight loss, depression, lethargy and/or dehydration. In ferrets, several conditions can result in diarrhea. Intestinal parasites such as *Coccidia* and *Giardia* can be a cause of diarrhea, as can viruses such as rotavirus (seen in young ferrets in North America), epizootic catarrhal enteritis (ECE is becoming more common in ferrets, typically in either very young or old ferrets) and, sometimes,

human influenza or canine distemper (fatal in ferrets). Some bacteria such as *Helicobacter mustelae* (a spirochete-type of bacteria), *Salmonella*, *Campylobacter* (proliferative colitis), and *Clostridia* can cause diarrhea in ferrets. *Salmonella* and *Campylobacter* are important zoonotic (can spread to humans) diseases.

*“Gastritis, proliferative bowel disease and eosinophilic gastritis are characterized by diarrhea.”*

Supportive veterinary care is essential in any case of diarrhea in these small mammals, since fluid loss can be fatal. It is also critical to have a specific diagnosis since some conditions are transmissible to other ferrets or humans.

### **Gastritis**

Gastritis means inflammation of the stomach. In humans, *Helicobacter pylori* has been identified as a significant factor in stomach ulceration. In ferrets, *Helicobacter mustelae* has been similarly found to be associated with stomach ulceration and inflammation. This organism can cause ulcers with gastrointestinal bleeding. It is reported that almost 100% of ferrets have *Helicobacter* by the time they are weaned, but not all will become ill.

Stress is a very important factor in the development of gastritis due to *Helicobacter mustelae*. Stressors can include changes in environment and/or diet. This often occurs when young animals are moved from the mother to a pet store, and then to new owners. If these young, infected, and stressed animals meet an older existing family pet ferret, that animal may become sick as well. Treatment for this disease requires a combination of antibiotics, together with gastrointestinal protectants and supportive care such as fluid therapy.

### **Proliferative Bowel Disease (PBD)**

This condition is similar to a disease with the same name in pigs and hamsters. It is caused by an organism called *Lawsonia intracellularis*. It is most common in young, fast-growing ferrets (10-16 weeks old) and can be linked to environmental and nutritional stresses. Infection causes a thickened lower bowel, which results in chronic mucoid, green diarrhea and/or a rectal prolapse. Affected animals make a rapid recovery when treated with the appropriate antibiotic therapy.

### **Eosinophilic Gastroenteritis**

This condition is relatively common in ferrets. It is an inflammatory disease process of the stomach and/or intestinal tract. Chronic diarrhea, with or without mucus or blood, is the classic symptom in these cases. While food allergy has been suggested in people and dogs affected with the same disease, no such link is obvious in ferrets. An elimination diet may be useful in the diagnosis of this condition. Eosin-

ophilic gastroenteritis can be a frustrating disease to treat.

*“Differentiation of the different causes of diarrhea and wasting can be difficult.”*

Differentiation of the causes of diarrhea and wasting can be difficult. Supportive care is essential since these small animals are very easily compromised by fluid and nutrient loss. All cases of diarrhea, vomiting, or gastrointestinal disorders must be brought to the attention of your veterinarian as soon as possible. Veterinarians that are members of the Association of Exotic Mammal Veterinarians (AEMV) are usually more adept in treating diseases of ferrets with GI disorders.

